

Detailed Action

1. This action is responsive to communication filed on: 25 January 2008 with acknowledgement of an original application filed on 31 March 2004.
2. Claims 1-22, are currently pending in this application. Claims 1, 4, 7, and 15, are independent claims.

Response to Arguments

3. Applicant's arguments filed 25 January 2008 have been fully considered however they are not persuasive.
 - I) In response to applicant's argument beginning on page 8, "In contrast, claim 1 recites an "said at least one interface processing device [] adapted to forward information to configure at least one of said at least one reconfigurable processing device and said at least one interface processing device, received by said at least one interface processing device"

The Examiner disagrees with argument, as shown in Ke col. 4, lines 10-19 the domains are configurable or 'reconfigurable' depending on the policy received and authenticated.

- II) In response to applicant's argument beginning on page 9, "Ke does not disclose "performing an authentication process on said received information if said received information does not comprise data for transmission," as recited in claim 1".

The Examiner disagrees with argument for multiple reasons. One the applicant is arguing a negative limitation that is not in claim 1, nowhere does it state "if said received information does not comprise data for transmission". In fact the term "if" is not utilized. Second Ke teaches authentication of data see col. 2, lines 1-21.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. **Claims 1-3, 7-12, and 15-20**, are rejected under 35 U.S.C. 102(e) as being anticipated by Ke et al. U.S. Patent 7,093,280 (hereinafter ‘280).

As to independent claim 1, “An apparatus, comprising: at least one reconfigurable processing device; at least one authentication processing device” is taught in ‘280 col. 1, line 65 through col. 2, line 9, note a data processing device in the processing system is equivalent to the reconfigurable processing device because the data processing device(s) as taught in ‘280 can apply policies received therefore they are reconfigurable. In addition the authentication engine is interpreted to be equivalent to the authentication processing device;

“and at least one interface processing device to be coupled to at least one of said reconfigurable processing device and said authentication processing device; wherein the apparatus is adapted to forward information to configure at least one of said reconfigurable processing device and said interface processing device, received by said apparatus, to said authentication processing device to verify that the information came from an authorized source” is shown in ‘280 col. 2, lines 10-18, note the ‘interface processing

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device' is interpreted to be equivalent to the 'controller' that intercepts packets and applies the appropriate firewall policies and calls to an authentication engine.

As to dependent claim 2, "wherein said interface processing device comprises at least one of a data firewall and a configuration firewall" is disclosed in '280 col. 5, lines 60-67, note when the firewall device acts like a common firewall this is interpreted to be equivalent to a 'data firewall' the configuration of the firewall device for each customer's policies and security needs is interpreted to be equivalent to a 'configuration firewall'.

As to dependent claim 3, "wherein said interface processing device includes one or more data node registers to configure said data firewall to permit forwarding of data to at least one of said at least one reconfigurable processing device" is taught in '280 col. 7, lines 7-49, note the interface processing device is interpreted to be equivalent to the controller, the one or more data node registers is interpreted to be the allocated security system resources by the controller on an as needed basis, and the 'reconfigurable processing devices' are the firewalls with respect to the VPNs.

As to independent claim 7, "A method, comprising: processing received information with a processing device specified by said received information if said received information comprises data and if the processing device is authorized to process said received information" is taught in '280 col. 4, lines 43-46;

"and performing an authentication process on said received information if said received information does not comprise data for transmission" is shown in '280 col. 4,

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lines 23-28, note the management device processes the received information, the management device can perform authentication as well as regulating policies.

As to dependent claim 8, “wherein said performing an authentication process comprises: forwarding said received information to an authentication device if said received information comprises a request to authorize one or more processing devices to process received information” is taught in ‘280 col. 7, lines 7-49.

As to dependent claim 9, “wherein said performing an authentication process further comprises: forwarding at least a portion of said received information to a received information interface device; and configuring said received information interface device based at least in part on said at least a portion of said received information” is taught in ‘280 col. 7, lines 7-49.

As to dependent claim 10, “wherein said performing an authentication process comprises: verifying that said received information is addressed to an authentication processing device if said received information comprises processing device configuration information; and taking security measures if said received information is not addressed to an authentication processing device” is shown in ‘280 col. 9, lines 41-59.

As to dependent claim 11, “wherein said taking security measures comprises: re-addressing said received information to an authentication processing device” is disclosed in ‘280 col. 8, lines 32-67.

As to dependent claim 12, “wherein said taking security measures comprises at least one of discarding said received information or performing a reset operation” is taught in ‘280 col. 8, lines 57-58.

As to independent claim 15, this claims is directed to a machine-accessible medium containing software code executed the method of claim 7; therefore it is rejected along similar rationale.

As to dependent claim 16-20, these claims contain substantially similar subject matter to claims 8-12; therefore they are rejected along similar rationale.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. **Claims 4-6,** are rejected under 35 U.S.C. 103(a) as being unpatentable over Ke et al. U.S. Patent 7,093,280 (hereinafter ‘280) in further view of Schain et al. U.S. Patent 6,944,706 (hereinafter ‘706).

As to independent claim 4, “A system, comprising: at least one reconfigurable processing device; at least one authentication processing device” is taught in ‘280 col. 1, line 65 through col. 2, line 9, note a data processing device in the processing system is equivalent to the reconfigurable processing device because the data processing device(s) as taught in ‘280

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can apply policies received therefore they are reconfigurable. In addition the authentication engine is interpreted to be equivalent to the authentication processing device;

“at least one interface processing device to be coupled to at least one of said reconfigurable processing device and said authentication processing device” is shown in ‘280 col. 2, lines 10-18, note the ‘interface processing device’ is interpreted to be equivalent to the ‘controller’ intercepts packets and applies the appropriate firewall policies and call the authentication engine

“wherein the system is adapted to forward information to configure at least one of said reconfigurable processing device and said interface processing device, received by the system, to said authentication processing device to verify that the information came from an authorized source” is shown in ‘280 col. 2, lines 10-18, note the ‘interface processing device’ is interpreted to be equivalent to the ‘controller’ intercepts packets and applies the appropriate firewall policies and call the authentication engine;

the following is not explicitly taught in ‘280: **“at least one analog front-end device to be coupled to at least one of said at least one reconfigurable processing device; and an antenna selected from the group consisting of monopole antennas, dipole antennas, antenna arrays, loop antennas, planar antennas, and reflector-type antennas”** however ‘706 teaches “Also coupled to the common bus 515 is a set of output connections for the broadband gateway 500. For example, if the broadband gateway 500 provides connectivity to a computer or computer network via an Ethernet port or a USB port, then coupled to the common bus 515 would be appropriate circuitry (540 and/or 545) for an Ethernet or USB port. Any required software

support for the network connectivity could be provided in the CPU 520, or in specially designed controllers (not shown). If the broadband gateway 500 supports wireless connectivity, then an appropriate wireless circuit 550 and an analog front end (AFE) 555, along with an antenna 560 would be present” in col. 13, lines 4-15.

It would have been obvious to one of ordinary skill in the art at the time of the invention a method using firewall techniques to process data packets taught in ‘280 to include a means to processes external and internal packets. One of ordinary skill in the art would have been motivated to perform such a modification because of the need to reduces the duplication of modules see ‘012 (col. 1, lines 59 et seq.). “A fairly common solution to the processing of external and local packets is to create two separate modules that are separately responsible for processing external packets and local packets. By separating the processing, it is much less likely that there would be interference since there is no interaction unless a packet crosses the interface. However, the separation of the processes can result in unnecessary duplication of modules, such as the communications protocol modules”.

As to independent claim 5, “further comprising: at least one host device to be coupled to said at least one interface processing device, the at least one host device adapted to provide information to be processed by at least one of said at least one reconfigurable processing device” is taught in ‘280 col. 7, lines 7-49.

As to independent claim 6, “further comprising: at least one analog front-end interface device to couple between at least one of said at least one reconfigurable processing device and said at least one analog front-end device” is taught in ‘706 col. 13, lines 4-15.

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8. **Claims 13, 14, 21, and 22**, are rejected under 35 U.S.C. 103(a) as being unpatentable over Ke et al. U.S. Patent 7,093,280 (hereinafter '280) in further view of Brownell U.S. Patent 6,754,831 (hereinafter '831).

As to dependent claim 13, the following is not explicitly taught in '280:

“wherein, if said received information comprises processing device configuration information, said performing an authentication process comprises: verifying a primary signature included in said received information; and verifying a link signature included in said received information if said primary signature is valid” however '831 teaches tunnel configuration data for a user which include a user signature, note the 'primary signature' is interpreted to be equivalent to the user signature' the link signature is interpreted to be equivalent to which third party signature authenticators in col. 11, lines 30-51

It would have been obvious to one of ordinary skill in the art at the time of the invention a method using firewall techniques to process data packets taught in '280 to include verify configuration changes with signatures. One of ordinary skill in the art would have been motivated to perform such a modification because of the disadvantages of most kinds of VPNs to selectively provide access to services see '831 (col. 4, lines 4 et seq.). “Yet another disadvantage of most kinds of virtual private networks is that users outside the primary network are granted similar access to the corporate network. Thus, such virtual private networks are unsuitable for common situations where it is desirable to "selectively" provide network access to various users on the same host, or to provide the same level of access to the same user on different external hosts. For example, an internal host ("clinical information server") in a hospital provides clinical

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information to clinical users. Patient confidentiality requires that access is generally denied to external hosts (i.e. hosts external to the hospital's network). Most virtual private networks do not concurrently prevent network access to the clinical server by one set of users, while permitting access to another set of users, e.g. doctors”.

As to dependent claim 14, “further comprising: forwarding at least a portion of said received information to an intended processing device if said link signature is valid”

however ‘831 teaches the signature information is used to authenticate data packets transferred in col. 11, lines 30-51;

“and using said at least a portion of said received information to configure said intended processing device” is shown in ‘280 col. 7, lines 7-49.

As to dependent claims 21 and 22, these claims contain substantially similar subject matter to claims 13 and 14; therefore they are rejected along similar rationale.

Conclusion

THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. It is noted, PATENTS ARE RELEVANT AS PRIOR ART FOR ALL THEY CONTAIN “The use of patents as references is not limited to what the patentees describe as their own inventions or to the problems with which they are concerned. They are part of the literature of the art, relevant for all they contain.” In re Heck, 699 F.2d 1331, 1332-33, 216 USPQ 1038, 1039 (Fed. Cir. 1983) (quoting In re Lemelson, 397 F.2d 1006, 1009, 158 USPQ 275, 277 (CCPA 1968)). A reference may be relied upon for all that it would have reasonably suggested to one having ordinary skill the art, including nonpreferred embodiments (see MPEP 2123).

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10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ellen C Tran whose telephone number is (571) 272-3842. The examiner can normally be reached from 7:30 am to 4:00 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kambiz Zand can be reached on (571) 272-3811. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/ELLEN TRAN/
Primary Examiner, Art Unit 2134
14 April 2008